



New South Wales Government
Independent Planning Commission

TRANSCRIPT OF PROCEEDINGS

RE: DEEP CREEK QUARRY

APPLICANT MEETING

COMMISSION PANEL: PROF SNOW BARLOW(CHAIR)
 JANETT MILLIGAN
 KEN KANOFSKI

OFFICE OF THE IPC: PHOEBE JARVIS
 CALLUM FIRTH

APPLICANT TIM MULLANEY
REPRESENTATIVES: JONATHAN BERRY

LOCATION: VIA ZOOM VIDEO CONFERENCE

DATE: 3.00PM ON WEDNESDAY, 6 DECEMBER 2023

TRANSCRIBED AND RECORDED BY APT TRANSCRIPTIONS

PROF. BARLOW: Well, let's begin and before I begin, I'd like to acknowledge the traditional owners of the lands from wherever we're coming from today. In my case it's the Taungurung People, the stone dwellers of the Strathbogie Ranges in north-eastern Victoria and we pay our respects to their Elders past, present and emerging. So welcome to the meeting today to discuss the Deep Creek Quarry project which is seeking, as you know, to extract 500,000 tonnes of hard rock per year for a 30-year period.

10 My name is Professor Snow Barlow and I am the Chair of this Independent Planning Commission Panel that has been assigned to determine your project. Joining me today, I have my fellow Commissioners Janett Milligan and Ken Kanofski. We also have online Phoebe Jarvis and Callum Firth from the Office of the Independent Planning Commission. In the interests of openness and transparency for the Commission our meeting today is being recorded and a transcript of this meeting - a full transcript will be posted on the Commission's website very shortly.

20 The meeting is part of our process to determine the project and it's one of the opportunities we have as Commissioners to ask questions, to gather further information and to get some questions answered that might've occurred to us after reading the material in both the Department's assessment report and your Environment Impact Statement. If we ask you some questions which you don't have an immediate answer for, it's quite acceptable to take those questions on notice and provide us an answer in the fullness of time - a written answer is fine and we probably don't need to do this today as there are only two of you and three of us, when we first speak we should identify ourselves but we're already identified on Zoom but just to ensure we don't speak over each other, let's be respectful which I'm sure we will be. Speaking over each other creates some considerable problems for the people transcribing and recording.

30 So thank you. Let's now begin and thank you for joining us today. This is - today we scheduled as a Panel to meet what we call the stakeholders of the project which is clearly the Department of Planning and Environment, the local Council and now you, the proponent of this project. We also look forward to joining you on your site next Tuesday and your participation in the public meeting which will be held next Wednesday. So I guess our first item we'd like to - unless you would like to describe the project to us or are you happy to just engage in the (not transcribable) (3.07.56) answers given - given that we've read your - your proposal and the Department's assessment of it.

40 MR BERRY: Yeah, Jonathan here. Look, I'm happy, I've got a - I did make a basic Power Point but it's probably more just for - so there's pictures and there's a few things that we can talk to and it might be useful for the nature of the questions.

PROF. BARLOW: How long do you think it will take, Jonathan?

MR BERRY: Look, I'm happy, we can just go through it and perhaps it can stop as you need be and ask the questions that might be appropriate at that time if that suits.

PROF. BARLOW: Why don't you do that and we'll see - - -

MR BERRY: And we can share it and we can go from there.

PROF. BARLOW: Yes.

MR BERRY: Let me just see if I can share this on the screen. O.K. O.K. So hopefully you have a presentation in front of you.

10 PROF. BARLOW: We do.

MR BERRY: You do. Fantastic. The system works. O.K. So, I guess - yes, so as a quick overview it's about 12 million tonnes of hard rock. There's obviously a range of quarry materials but the high grip and light-coloured nature of the rhyolite resource is probably its key - one of its key attributes looking to pull out up to 500,000 tonnes per year. You know, we've got the new intersection, access road, workshop, stockpiles, weighbridge, office.

20 The operational hours are really targeted around daylight hours Monday to Saturday and we've sort of been on and off on this project since about 2014, so it's nearly been 10 years in the making. Here's the site. This one here is probably just tied to the next page which gives some context. We've got the access road in here off Deep Creek - if I just make - don't know if you can see my mouse there. Can you see the mouse or not?

PROF. BARLOW: Yes, we can.

30 MR BERRY: You can. Yep. So we've got the intersection there off the Bucketts Way. We come in through here, across Deep Creek, we have our office and weighbridge, workshop in here. We come across here to the quarry pit and we have out stockpile area just to the north here. This is our stewardship site that we've committed to creating and then this stewardship site is potential subject to the fulfilment of an option.

PROF. BARLOW: O.K. What is that fulfillment of - what option?

40 MR BERRY: So we created an option with this landowner early on which basically sort of gives him the - it sort of - I suppose the option - the only question mark on the option - within that agreement he has the option to say, look, I understand there's a quarry there but I really want to just go and hang out there anyway but I know - I'm accepting that on the basis there's a quarry next to it. So he's got an option there. All indications are at this stage is that he's very keen for us just to buy the property - buy the property and, you know, he'll go on his way.

MR MULLANEY: Might just add a little bit there if that's all right, Tim. Yeah. Steven had approached me and I'd contacted him as well about the quarry and he wanted to ensure that his property didn't lose value if a quarry went in and that's why

the arrangement was made. So it was a mutually-agreed amount and property value and all the rest of it so, yep.

PROF. BARLOW: Is that the property on the potential stewardship site, is that that whole property or what?

MR BERRY: That's that whole property, yeah. So the stewardship site is just the pink area, it just leaves the open grasslands and there's, I guess, a weekender or a shack that's there at about that receptor number 3.

10

PROF. BARLOW: Yes.

MR BERRY: So that's - that's kept out of the stewardship site at this stage and, you know, it makes - from a management perspective normally with stewardship sites it's good to attach them to - to have a house site potentially down the track so someone can live there and manage the property in the future.

MS MILLIGAN: And what's the timing of that decision, you know, when it - when potential becomes other than potential?

20

MR MULLANEY: Basically on - on approval and Tim might be able to correct me on this one, but on approval of the quarry or determination of the quarry that's when the option agreement sort of starts to kick in.

MR BERRY: That's right. There's a due diligence period depending on what the outcome of the, you know, consent is, if it's approved and if it's a viable proposition to see it as we'd like to then that triggers the purchase of the property.

30

PROF. BARLOW: O.K. Thank you for that. And one quick question for me just so I get it in my head is we gather from your proposal that you'll be - you'll have a mobile crushing plant. So you'll be basically crushing in the pit?

MR BERRY: Yeah, that's correct.

PROF. BARLOW: And then stockpiling north of that. So where are the trucks loaded?

40

MR BERRY: Bit of both. Basically you'll have - and we can find another plan a bit further on but the trucks will come in through here, there will be a cutting basically on this bottom side of the quarry pit. That will allow them to access in this area for some materials and then the other materials will be stockpiled up in here and be loaded up here. So that - this sort of path through here would be the path of a - of a product truck and he'd come in and curl around and depending on what material he's picking up would be depending on where he's loaded.

MR MULLANEY: I might just add there, Jonno. So for practical purposes when you're crushing hard rock it's potentially 30 percent of your production is crusher dust so you would not want to be hauling that to the main stockpile area if you could help it

so you would stockpile that near where it's being produced and stockpile - additional on the main stockpile area if you needed to and also with gabion rock and armour rock, for example, that would be stored. The gabion rock would be stored near the crusher and the armour rock would be left in the quarry itself and that would be loaded - sorted and loaded from there. So the premium products such as the aggregates would all be stored in the main stockpile area.

PROF. BARLOW: And is it all conveyed there by - by conveyor belt or by a truck?

10 MR MULLANEY: Loaded from the belt onto the dump trucks to then haul it across to the gully crossing which is there.

PROF. BARLOW: O.K. Thank you.

20 MR BERRY: So this one here just gives you, albeit it looks very busy, I will admit, but just some context on the topography. So, I guess, if we started on this top one, this is looking from Deep Creek - sorry, from the Bucketts Way down here at the start and so the Bucketts Way is down here and we look up across the Deep Creek Flats and you have our office coming in around here and I notice this is slightly off centre and then you have the quarry resource here with the large ridgeline sitting up here behind it and then if we look down this way towards Forest Glen Road you have basically Forest Glen Road over here on this hill, we come down into these gullies through this creek line, up a small hill, up a larger hill and then we're sort of just on the back of - on the back of that and that depends on where you are as to - so on the eastern side of the quarry pit it's a bit flatter and you can see that on the eastern one versus the western one we're up on ridges. So if there was absolutely no trees whatsoever there would be half a chance that you could see something tall on this hill.

30 MR MULLANEY: A drill rig basically on the very initial bench and after that it would all be below the bench.

MR BERRY: So I guess - and that's in the absence of any vegetation at all. Basically this - as you can see here, this is all quite mature vegetation right through all of these ridgelines so that sort of just helps provide some context on the topography and why when we talk about the visibility of this quarry it is quite limited.

PROF. BARLOW: Jonathan, that's the vertical axis on those diagrams?

40 MR BERRY: Yes.

PROF. BARLOW: You know, the height of that hill behind the quarry?

MR BERRY: I think actually I do have that on some plans. This is about one - from memory, one-hundred-and - I'm sorry, let me just flick down here and I'll tell you. So the pit crest is at 106 - - -

PROF. BARLOW: Metres. O.K.

MR BERRY: - - - metres.

PROF. BARLOW: (not transcribable) (3.18.00), yes, of 115 metre. I can see 106.

MR BERRY: Yeah, 106 there, 119 peak here.

MR MULLANEY: 125.

10 MR BERRY: (not transcribable) (3.18.08) through there and this local little high point is at 148. So it's sort of - so I'll come back to there. So - and I think must - this should be 100, it's been obscured, I apologise. So that's - - -

PROF. BARLOW: There it is, it's down the bottom.

MR BERRY: Yeah, these ones have 100 there, yeah. So just to - some reference of - of the rough lay of the land.

PROF. BARLOW: Thank you.

20 MR BERRY: Now, this is just the plan you would've seen within the - within the consent. This is - or the draft consent, I apologise, the layout. So we have a construction compound down here near the new intersection, sealed access road, we have a tarping bay and a turnaround area down here on the flat before we cross Deep Creek, come up into our office and workshop where we have a weighbridge, office, workshop in this area and go through into the pit and then the stockpile area there.

MR MULLANEY: And the water management dams you can see in there as well.

30 MR BERRY: Yes. Dams on the lower side. So from a - I guess, probably worth pointing out some of - obviously noise and dust and the visibility have obviously been key things that we've had to consider since we've been working on this project and that's why you can see where we've put it we've tried to keep it fairly discreet and keep ridgelines to the south of the project intact.

40 So the whole area is - obviously is hard rock but we've actually looked to pull that right back. We had some early pit iterations that looked to avoid - you know, they might've been shaped more like this sort of thing and they looked to avoid patches of - there was some TJ in this area, Tetratheca Juncea, threatened flora and we looked to try and avoid more of that and then the more we went, the more we realised that it actually became more valuable from a quarry perspective to look at a smaller, more discreet boundary focusing on the highest value of the resource as opposed to a broader pit that would pick up a mixture of quarry products and affect a larger area. So we've actually looked to - we went through a few iterations with some very optimistic pits early on that, you know, might've looked to take out a whole lot of the hillside and then we wound it back to that point at the end of the day.

MR MULLANEY: And that pit design also (not transcribable) (3.20.43), Jonno, that it actually avoided a lot of TJ up on the hill there too so - - -

MR BERRY: It did, yeah, so - so in terms of the access road, we had a few - very early on there was some discussions about using Forest Glen Road as an access and that was partly because Forest Glen Road has a resolved intersection onto the Bucketts Way, it's fairly straightforward, but that was quickly, I guess, shut down and given the residents and the steep grades as you go into the site, if I come back to this plan - no, probably another plan down the road - we investigated going through R33. Let me get to a picture, sorry. I thought I had this laid out. O.K.

10 So this is - in terms of that project we came down through access road. So Forest Glen Road, initial thoughts to come through here. Given the intersection down here was resolved we put that to bed pretty quickly because this is quite a decent hill in here so you'd have the noise of trucks up and down here and let alone disruption along this road.

We then looked at Deep Creek Road. There is some - there was some issues with this intersection given where it was in proximity to Deep Creek and the Bridge there but then also ultimately as we surveyed this road alignment it became apparent that it didn't really fit. The road was pretty much - the correct road alignment would've gone
20 through property 5's house or their shed and so we looked to find some alternative options, explored property 33, again that doesn't really work from a topography perspective and then we arrived at where it is - the property that it's currently at.

Initially we had it coming right down this fence line because this property 4A has a handle that comes to the Bucketts Way and so we were looking to use that handle and come along that fence line and go in and then during the process, some discussions with the Lancasters came up which saw us move it down the hill. They sort of requested to see if we could move it. We went back and fortunately we could - with the engineering we could - found we could actually position it further south while still
30 getting in the requisite acceleration, deceleration lanes and then renegotiated the agreements with the Murrays on this property here which as centred in its current location. So there was a little bit of back and forward there.

MR MULLANEY: We moved it considerably from being about 120, 130 metres from R30's house to being about 280 metres away to its closest point now and, yeah, so visibly happy when we went and had a look at it, every step we took away from their house towards the proposed access road alignment so, yeah, they were much happier but they're still not keen on a - on a quarry access road but, yeah, they're much
40 happier with its location.

MR BERRY: So let me go to - where are we? Page 8. So then in terms of the material, I guess this is something that we took a bit of time to go through within our response to submissions in terms of the colour of the rock and the reflectivity side of things. We saw that as a fairly - Tim identified that fairly early as a fairly high value thing and then there was - I think, Lake Macquarie Council had some discussion - we had some discussions with them and they certainly were looking at it from their urban heat strategy and things like that. So Tim arranged to prepare a whole - quite a few samples and I think it was tested at UNSW, Tim?

MR MULLANEY: Yes. Yep, tested down there and they did a - a full report on it which is in the documentation. So it is - it is a very good alternative to the normal duty aggregate so they're around, as far as the light colour goes, to help mitigate the heat island effect and there's councils already in Australia that are ready to go with it and want to use it. There's been trials done around the world and proved the benefits of it as well as reducing street lighting and reducing electricity costs and greenhouse gas emissions.

10 It sounds like a great sales pitch but the documentation is available online to substantiate all that and then the high grip factor as well and I've been in quarries for 40 years and sold high grip aggregates over the years which has been in very short supply so slag's an approved alternative which is the one - one of the ones there in that bottom left corner in the picture and the other blue metal ones are just normal duty PO3 around 48 for local quarries in the area.

20 So the high grip - (not transcribable) (3.26.17) high grip end which is 57 to 65 POFE and it's used on black spot bends, roundabouts, bus stops, intersections. RMS have wanted to use it on highways but it hasn't been available. They continue to specify it, they have real interest in it. Slag's an approved alternative but it has its own availability issues and it's much heavier and it's a long way to cart it.

30 So, yeah, I've sold rhyolite before from Coffs Harbour to Canberra for its decorative and high grip properties and, yeah, so I see a great potential with it operating as a - not just a boutique quarry, it will be able to supply, if approved, normal duty concrete and asphalt aggregates but the aim, you know, really is to try and supply that higher end with the decorative high grip polished concrete as well as the lighter coloured ags to asphalt and I really think that it will catch on as awareness, you know, grows across the board.

PROF. BARLOW: So, Tim, you mentioned that those reflectivity tests are available on the web. Is that in - that's subsequent to your original EIS, isn't it?

MR MULLANEY: It is. We added it, it's on the - Jonathan's added it to the documentation.

PROF. BARLOW: Yes.

MR BERRY: I think within the response to submissions documentation.

40 PROF. BARLOW: O.K. Thank you.

MR MULLANEY: If you want anything like that emailed to you we can certainly email. Just send us an email request or whatever and we'll dig it out.

PROF. BARLOW: Thank you.

MR BERRY: So, I guess, if I touch over onto biodiversity. No doubt there's plenty of information so I've sort of just touched on the key points, I suppose. There's been some fairly extensive surveys across the site over quite a few seasons given the age of the quarry in its development phase. We've had a fair few seasons of picking up Tetratheca in the area and then we did go through a fairly extensive process of identifying New Holland Mouse and potential habitat for New Holland Mouse and some additional trapping there. Same for koala.

10 We've got a fair - quite an extensive range of controls that we built into the design which I'll touch on in the - in the images to follow and then we have the management controls within the consent, obviously, you know, all the rehabilitation, biodiversity management controls somewhat convention - somewhat typical of a quarry but then in addition we've got the New Holland Mouse relocation plan and some - some additional controls on Tetratheca.

20 We've looked at the stewardship sites already and identified that option agreement for the extra 125 and the plan is with this quarry is to have a staged retirement so we'd look at securing the - obviously we have to get our credits prior to impacting the biodiversity and the aim is to really do that in as smaller chunks as possible early on to ensure that we have enough time to develop the onsite stewardship site and use - and ultimately use as many credits as we can from the onsite stewardship site rather than buying them elsewhere or paying into the fund but that's - the - I guess, the sourcing of those credits is very much related to time and we know that in setting up stewardship sites there can be - can be delays and they do take some time to set up so we've just tried to be conscious of that within our approach so the quarry can proceed albeit at a slightly higher cost if it's out there securing its own credits.

30 So this is just to touch on the - go through the plan. So we've got - these pink ones really highlight the - a lot of the fauna components that have been built into the design. So there's fauna exclusion grids through this, I guess, timbered - timbered area through here and so we - grids on the outside, fencing on either side and some fauna underpasses built into the system. You'll also note on this one we've got on the northern side of this road at the front we'll have a low - low-bund and vegetation screening. This is a feature that came out from discussions with Mark and Debbie up here at number 30, the Lancasters.

40 MR MULLANEY: And on that slide it's also worth noting that on the right-hand side is the Karuah National Park and so the trees - you can see there's quite a lot of trees in that area that are contributing to their corridor.

MR BERRY: So if we come along here we've got some supplementary planting in around the underpass areas, that's a recommendation from the koala expert. Biolink, suggested we put some planting around some of these underpasses which draws them to those points and then they're more likely to move through those areas. We've got some - within this Deep Creek area we've got some long - the intent is really to slow the traffic down sufficiently through this relatively small area. Slow it down through some speed humps, speed control measures, keeps trucks going fairly slow through

there and there's a large fauna underpass ledge through the culverts underneath - underneath the road there.

We've got our quarry pit here. You'll see these green areas here on the top sides, that's the - the preferred koala feed tree planting areas so which sort of - there is, I guess, some overlap with the riparian zone incursion. So we have a riparian zone here where this dam incurs within the outer 50 percent zone of the riparian area. So there's some replanting this area here which is about 2.9 hectares is intended to both cover a degree of the - cover the koala offset - preferred koala feed tree planting requirements in addition to improving the riparian corridor consistent with the riparian guidelines. What else? So that's - I guess, that's the design there. I don't know if you've got any questions on - - -

PROF. BARLOW: The only question I have and Janett and Ken may have some more, when you say quarry dam variable size, is that going to increase with time? Why do you say that?

MR BERRY: Yeah, I guess, at - so this is the - when we start we'll come in here, this area here will be started on this side. So this ridgeline runs through the middle basically or basically that road is the current ridgeline. So we intend to start on this side of the pit and so early on when the quarry's quite small, when the disturbance is quite small that dam doesn't need to be very big and so that's why I've tagged it as variable size because as the disturbance area gets larger we need to make sure that that dam keeps up with the disturbance area so we have sufficient capacity to capture - capture the sediment-laden water out of the pit. So that's - that's why it's a variable - variable size.

These ones are very much a fixed size and I think probably from what I've seen very generally sized or probably on the larger size given how they've run the calculations. So they're - they're quite - quite large and will certainly cater for quite a range of events, I think. You can see we've put it between the two drainage lines so the drainage line runs through here and on the other side and we're up above - so Deep Creek's here. Topographically the pit floor sits above Deep Creek by in the order of, I think - well, there you go, that's 27 metres, that's 37 metres so it's about 10 metres above the - above the Deep Creek, quarry floor.

These benches here you may see two different sizings. Basically early on we have wider benches that can be travelled on and then as the pit progresses these benches get narrowed down as we go. So that's - - -

MR MULLANEY: The pit's designed to be free-draining as well.

MR BERRY: So the intent long term and we'll touch on that at the end, I suppose, is that this drains down through here. At the end of the day there will be a - I guess long term a wetland structure here that would end up helping filter that as, you know, once that's all the rehabilitated and it will drain out through here and down through this creek line.

So, I guess, traffic and transport. I thought it worth touching on the various numbers that are floating around in the document. So at 500,000 tonnes per annum, five and a half days per week, 52 weeks a year you'd need to maintain 55 laden trucks or 110 movements to achieve that extraction rate and then so what we've done is to allow for some redundancy and the typical construction peaks would put that maximum on any single day to 125 or 250 movements. So we'd sort of expect that to be busier in the morning and the late afternoon associated with traffic coming out of Sydney or going into Sydney and then - - -

10 MR MULLANEY: There's also some days when nothing goes at all because of wet weather or things like that and then all of a sudden, you know, it gets busy again.

MR BERRY: Yep. So we have contributions, section 7-11 contributions for the maintenance of the Bucketts Way and then we have a TMP and a code of conduct for quarry drivers to help minimise traffic-related impacts out of the quarry.

MR KANOFSKI: Just a question on the traffic, the traffic and transport. The reasoning for starting loading at 6.00 rather than 7.00 because obviously that gives you - puts you in night time and, you know, as different noise restrictions and the lot, is that a capacity issue or is that an avoid peak traffic issue, what's the - what's the - - -

20

MR MULLANEY: The logic?

MR KANOFSKI: What's the logic? Suggest that you need 12 hours or what is the logic?

MR MULLANEY: I think the loading - was the loading from 7.00, wasn't it, Jonno? Didn't we have that communicated? I think it was the quarry started at 6.00.

30 MR BERRY: No, I think - I think - no, that's - that's right, Tim.

MR MULLANEY: And then we worked on - on 7.00 for actually loading and we wouldn't have any trucks - the traffic - the production and everything would make it so we didn't have any trucks lined up, they wouldn't be allowed to come into the quarry till about quarter past 7.00 because we didn't want them queuing at out the front.

MR BERRY: You're right, Ken, it's a - it's a 6.00 - 6.00 to 6.00 for load and despatch and as you say, that's really around not making too much noise before daytime criteria kick in so they are in that shoulder period loading and, I guess, it does help you - if a truck's coming out of Sydney, you know, and if he's picking up at 6.00 he's not going to be able to be back in Sydney until, you know, 8.30, 9.00 - 9 o'clock, probably 10.00, I suppose. So there's - I guess there's a - probably a commercial incentive to be early enough and it just helps distribute the traffic through the day.

40

PROF. BARLOW: I'm just - - -

MR KANOFSKI: Just you touched on those issues of queuing of trucks and all that sort of stuff which can be an issue. In a practical sense - so, I guess, first question is trucks are presumably owner-drivers, truck, dog - - -

MR MULLANEY: Can't quite hear you.

10 MR KANOFSKI: Sorry. Sorry, I've got an issue with my microphone. Yes. So presumably - just touching on the management, those trucking issues. So presumably it's subcontractors, truck and dogs and part of community concerns are always around the behaviour, I guess, of, you know, trucks queuing from, you know, 4.30 in the morning or speeding and doing all those sorts of things. I guess I'd be interested in what - what measures you take to control those kind of subcontractors?

MR MULLANEY: We would have an induction in place and the driver code of conduct and be strictly enforced and they'd be banned from site if they breached it and I think they'd probably get a warning and depending on how serious the breach is but we do not want trucks queuing at the front. The trucks cannot be permitted to arrive until it was after the gates were open and they were able to come all the way into the quarry.

20

The situation is with - with Mark next door with the - with R30 is the last thing we want is having a queue of trucks there to then all start off at the same time and have an acceleration of diesel fumes and all that sort of thing. When the speed limit of 40 kilometres an hour is in place they should be able to go up the hill quite slowly and without a lot of exhaust and up and over the hill and when they come back out of the quarry they're loaded, they get to the top of the hill and then they're virtually idling down the hill until they get to the actual intersection itself.

30 So very mindful of the neighbours and definitely want to keep a firm grip on driver behaviour and not just on the access road but obviously the code of conduct on the Bucketts Way but then they all have their drivers licences to comply with and the road rules.

40 MR BERRY: I guess, practically I had a little bit of experience with driver code of conduct on a sand quarry along Cabbage Tree Road in Williamstown and we do have a code of conduct for them as well and that was very much brought in as a - for the same issues that were raised. We had houses across the street, concerns about trucks arriving early, queuing, you know, lining up, parking or idling at the driveway, all of these type of activities and what has worked well is the - let's say quite a low tolerance to that - to exceptions to that code of conduct.

You have to - before you pick up a load of material they have to log on and like go through an induction, they'll have to sign off on that code of conduct and so when they have broken that, there's been quite a few drivers that have just been banned from site. The company, if they're part of a bigger company that will get a warning and that driver ends up getting banned. That tends to provide a fairly good incentive to not rock the boat because that's their livelihood, I suppose.

MS MILLIGAN: While we're talking about the potential traffic management plan can I just ask you if you've put your mind to sort of the detail around the condition that you'll have measures to, you know, avoid conflicts with school bus times and routes, et cetera, because you've just answered fairly comprehensively how you've sort of thought about some of those other issues in the plan, just wondering about that one. So once they get out onto Bucketts Way.

MR BERRY: Yeah, I think - sorry, Tim.

10 MR MULLANEY: No, you go, Jonno.

MR BERRY: No, you're right, Tim.

MR MULLANEY: The - there's - we talked about different ways of trying to control, you know, that particular clash with the school bus, like the times but there's other issues that get impacted. If you're trying to park trucks, pull them up further down the road, where are they going to queue, then they all arrive in convoy to the quarry and all the rest of it. So you're better off to let them come in one at a time as they're staggered and spaced apart and once they get on the - on the highway they are
20 complying with their - their drivers licence and the New South Wales road rules, you know, so trucks are going up and down the Bucketts Way all the time for all sorts of industries and they take appropriate measures when they go past school buses, whether it's the 40 kilometre an hour that's on the back of the bus when they're got lights flashing or whatever so - - -

MR BERRY: I think one of the early or the primary concerns, at least, that was raised during our consultation - during the consultation process was around Deep Creek bridge and so Deep Creek bridge was quite a narrow bridge and so if you had - and typically you would have vehicles and they seem to manage it, there would be UHF
30 communication and they'd try and avoid passing each other.

MR MULLANEY: Trucks have actually clashed their mirrors passing that bridge on occasion over the years and so they would communicate but it's going under a complete replacement. They've replaced half of it, it's been held up by a discovery of an NBN cable at the bridge abutments and they've lost two months there but over the next few months they'll have the other side open. They've just replaced the Deep Creek bridge - - -

MS MILLIGAN: So this is Limeburners bridge?
40

MR MULLANEY: This one's Limeburners Creek bridge, yeah. So the two bridges -
- -

MR BERRY: That was the - I guess, the primary one and, you know, when you went on it it did feel narrow, like even in a car. So I think there was certainly voiced concern from - from residents in the area about, you know, buses - travelling on that and, you know, increased numbers of trucks. I mean, there's other trucks on the road but the increase of number of trucks and they tagged that additional risk factor there

but as I say, with the increase in that road width or the bridge width that's - I guess, the concern there, I think, would be somewhat appeased albeit, you know, there is - obviously we know there is a sensitivity to it, it's just the - to ensure if we had a school bus window that runs somewhere between - I think it's between 7.00 and 9.00, thereabouts, it's probably not quite in that range, it's quite a window to manage the number of trucks and how you juggle that traffic and how they juggle the consequential customer demands within Sydney or, you know, in their three hours from their destination. So we have given it some thought but we - to be honest we haven't necessarily arrived at a - at a great conclusion on the best way to mitigate that.

10

MS MILLIGAN: And just one last question. You've talked a couple of times about timing the departures, et cetera, to sort of get to the Sydney market. Is that - is that the main destination market for the product?

20

MR MULLANEY: The main destination will be anywhere we can sell it to pretty much and obviously the local asphalt plants will be - and landscape yards and concrete plants will be the main target because of the radius, competitive radius but we hope to get it further afield and, as I said, this material can travel a long way because of the properties of the material with a high grip as well as the light colour. So I envisage it growing and the demand pushing it further up the road as well as down the road, you know, so I guess it - the rhyolite, the high grip material has never been fully explored so it's almost a bit of an untested market in a way because I used to sell it when I worked for another company and I always saw the need and I always saw the shortage.

30

I had pages and pages of customers wanting it and we could never meet the demand and it wasn't high on their agenda because it was a small boutique operation with very limited material and so I think that market can definitely grow if you've got material available at the right price as well as - it's the availability, the lack of availability has really turned that market away. So it needs to be - if it's got the opportunity to be catered for properly I see that travelling quite a long way, yep.

MR BERRY: O.K. So are we right to move on to touch on water?

PROF. BARLOW: Yes. Sorry, I might just ask you one more question.

MR BERRY: Yeah, sure.

40

PROF. BARLOW: In terms - it's really jumping back because it's related to traffic. The community consultative committee, have you given any thought yet to how you might manage the relationships with the community? Clearly transport's an issue and what sort of information you might provide them with - about your, you know, projected workloads, et cetera, and what the immediate past workloads have been?

MR BERRY: Yeah. Certainly it's very easy to, I guess, report on - report on traffic that has - has already come out of the quarry and weighbridge records and another quarry CCC I present information at we do consolidate a lot of information on how many trucks went out on various days and what months, you know, it will be a quarterly meeting and we'll go through, you know, how busy it's been.

We haven't had much on a predictive space looking forward and it tends to be very much - can be quite a weather-related - you'll have weather-related peaks and troughs. So I would envisage really, I guess, the CCC in the transport perspective listening to - listening to what the concerns are we'd be presenting, I guess, how much or what we are doing, what drivers - you know, what issues with the code of conduct have occurred and our response to those. We'd be looking at, you know, any, I guess - looking to flag - one of the things that I think is quite - quite an important issue is to ensure that where there's issues with the roads, say in terms of road repair and the integrity of that road that it's actually reported fairly frequently.

So we'd be looking to sort of ensure that the community is both coming back to us with issues that they've noticed within the road and also we'd be sort of looking to make sure that we're reporting that through to Council on a regular basis so those roadworks can occur so we don't end up in a position where we're paying a maintenance levy but the road isn't being maintained to a suitable level for the people that are on it on a day-to-day basis. So there's some mechanisms around that we're looking to implement.

20 PROF. BARLOW: Thanks. Perhaps you should move to water if that's - - -

MR BERRY: O.K. So, yeah, I'll - so as I touched on earlier, the pits outside of Deep Creek we've got the (not transcribable) (3.51.05) creeks north and south of it. The picture here on the right is Deep Creek in, I guess, probably quite good conditions. It will go - the water levels do go up and down, you end up with sort of somewhat stagnant pools and then it's - you know, you get some quite good flows through there as well. So that's what Deep Creek looks like. Because of the water - the landholding we have we have a fairly good licence entitlement and we do need to get some licences out of the fractured rock water-sharing plan.

30 We have the two sources of supplementary water, one over the hill, one next to the - quite next to the office and that's really about just increasing the - I guess, the surface area that we can capture that surface water - not capture, or access additional - access that water from those dams. We don't have any - - -

PROF. BARLOW: Would those fractured licences be within your site?

40 MR BERRY: So, yeah, the fractured rock licence under the water-sharing plan is for the - it's within a region that goes up to Armidale so it's the Tablelands area. So we do have to acquire those but the Office of Water has suggested that they are readily available or they've - they're within - they haven't all been issued, in effect.

PROF. BARLOW: O.K.

MR BERRY: We don't have any impacts on flattening so we've modelled our culverts going across Deep Creek and looked at how that was going to affect flooding. Nothing identified there of any note and the groundwater impacts - because we are - if you can imagine we're above Deep Creek and we're going into a hard rock it's quite a

lot of fractured - we end up with some fractured - water within the fractures so it's fairly negligible in the context of groundwater impacts. The drawdowns are quite isolated and, I guess, more higher. If you can imagine where you go further into the - and the pit gets a bit deeper and as you come back towards Deep Creek they tend to dissipate fairly quickly.

10 One of the key issues that we - we have identified and that we need to manage is managing that water quality during the construction, same as any operation but, you know, we know that this is a matter we need to be quite considerate of and then during operations obviously we've got some discharge provisions where we need to ensure we are managing that water and discharging appropriately so we're not - we're not exceeding of our - not exceeding the discharge criteria but while also retaining enough water that we have - you know, so it's a bit of - a bit of a juggle there in terms of our process but making sure we have enough water to manage our operations without keeping the dams too full, I suppose.

20 So this gives you just a bit of our highlight of the creeks in the area. This is Deep Creek running through here. You've got another - quite a significant creek running through here and that's - what's not quite shown is the main part of this catchment runs off to the south and around here. This is one of our water sources here and that's the purpose of this rather long and thin little point and that's really just intended to be some poly pipe going up to a breather point - breather tank on top of the hill and down the hill. So - - -

MR MULLANEY: That's what we refer to as the Mill Paddock Dam, there used to be an old sawmill on site and the place has been previously logged.

MR BERRY: So, yeah, that's - - -

30 MR MULLANEY: That's a pretty good dam.

MR BERRY: Very much a small - it looks a lot bigger than it is, I guess, is what I'm trying to point out there. So then there's another dam in just here, so we'd look to top up as well. I guess if there's no question on water we can touch on noise. No particular issues with noise levels with the exception of the property to the north. R25 had a - when the wind was blowing up the valley we did get to a - I think it was 2dB or less impact on that. that's a - that's not a permanent residence at this stage. So - but in terms of this quarry design we have been, as I touched on earlier, very conscious of extracting from the quarry in a sequence that would ensure there's a ridgeline to the south and west of us at all times to try and keep that noise down.

40 Onto air quality and human health. I guess we've modelled the air quality impacts and, you know, they are predicted to be within the accepted criteria. Early on we touched on relocating the access road to accommodate the concerns on R30 due to his hypersensitivity. So we moved down and then looked to add some low-planted, low-bund with vegetation and then also as Tim touched on earlier measures to look at minimising the speed limits and trying to avoid idling and things like that in that area and that's where we do have a turnaround area which I pointed out earlier. A

turnaround area down here. So you come over the hill and this is where a truck would turn around so we don't have - minimise the amount of activity in this area. They - very much once they're in they have to come up and over the hill and they can turn around there before coming out.

10 Some of those initial discussions around here was, you know, we'd probably have a gate into the site somewhat and just really to ensure trucks aren't parked on the street if for whatever reason this gate was obstructed but really the intent is, is that the quarry staff will be in there nice and early, open those gates and so trucks can come all the way through - through and into this area here and then, you know, proceed into the quarry as need be. So that keeps - keeps those trucks queuing and, I guess, away from - away from the road and away from the residents there.

MR MULLANEY: There would also be a gate just near the creek there, just on that side where the mouse is and that way the property owners - you know, the front gate would have a key code on it so that the property owners can access and use that road if they wanted to and they could pass that code onto friends and family to come in but of a weekend it would stop people from coming and having a party down there at the truck turning area. So the last thing they want is hoons down there and, yeah, so that would be beneficial. People that we've spoken to would appreciate access on that access road and - - -

MR BERRY: Sorry, that's - - -

MR MULLANEY: - - - (not transcribable) (3.58.31).

MR BERRY: Yeah. So this - I suppose that's worth pointing out that this - this road here we've got agreements or we've put forward in our documentation and have spoken to the residents. So R25 to the north would get access as well as, I think it's R1 which is currently there's no property - - -

MR MULLANEY: That's a land-locked property.

MR BERRY: - - - as in a house or - land-locked property but we've suggested we're happy to provide legal access along our access road once it's constructed.

MR MULLANEY: And you haven't mentioned that we've got an agreement in place with - for the actual access road so if the quarry's approved we proceed with finalising the purchase of that strip of land and - and that all rolls forward.

40

MR BERRY: Yep. So visual. As we sort of tagged it is quite - the visibility of it is limited, the main area that anyone will see is the intersection and the start of the access road as it goes up the hill. The rest of the site is quite well hidden. It's not - I guess, on some of the adjoining property hills it wouldn't necessarily prevent someone from going to the top of the hill and getting a filtered view from the back of their hill but otherwise it's quite - it's quite hidden. As I've mentioned earlier, we've retained the ridgeline along the western side of the quarry and the ridgelines on the southern side of the property should also - also help that visibility.

MR MULLANEY: When we visit - when we visit the site next week we go up to the top of that hill that Jonno pointed out and it actually gives you a very good birds eye view of how secluded the hill - the quarry extraction area is among the surrounding hills. Gives you very good visual.

MR BERRY: Yeah. So we've got this ridgeline through here that we've kept and largely this ridgeline here has been maintained intact as well.

10 PROF. BARLOW: Jonathan, how much have you got to go because we're going to run out of time.

MR BERRY: We have probably two pages, three pages. No, it's up to you, we're in your hands.

PROF. BARLOW: O.K. How - just let me ask Ken and Janett, are you able to extend for say 10 minutes at most?

MS MILLIGAN: I can.

20 MR KANOFSKI: Yeah, I can.

PROF. BARLOW: O.K. Fire ahead, Jonathan, because we probably have an odd question for you - - -

MR BERRY: O.K.

PROF. BARLOW: - - - after you finish.

30 MR BERRY: No worries. So, I guess, on the social side of things noise and dust is certainly - we know that's a sensitivity - we haven't identified any property other than those I've - the temporary one I've mentioned or the part-time one I've mentioned being impacted. No one's been displaced from their house due to noise levels. We've got an agreement with the neighbouring property to purchase them, that's a weekender as well. So from a - I guess, a dwelling perspective it's not too bad.

40 From a traffic we know that is - has been an important point for the community and it is pretty much on all quarry projects, I would imagine, and I think a lot of that has been related to Bucketts Way and its condition and there's been a lot money recently committed and somewhat being spent as we go in improving a lot of those pinch points. So I expect trucks on the road will always be a point of concern for members of the community. It should be - I guess, the impacts or the risk and the perceived risk of that should reduce as that road condition improves.

MR MULLANEY: It's improved substantially from the proposed quarry down to the Bucketts Way in the last 12 months even, yeah.

MR BERRY: So one of the things that was tagged also which I thought would be worth mentioning is this perceived change in, I guess, the reputation of the area where

if you've got a bed and breakfast perhaps or that sort of thing where people are worried about wildlife reserves and those sort of things. One of the biggest changes in land use as a result of this project will be action on the conservation or stewardship sites that we're putting in. That picture here is just highlighting an area within the stewardship area.

10 MR MULLANEY: I'd like to just add there, Jonno, that in that area and I've walked the property extensively, there's the most beautiful parts of the property are all in the stewardship areas. It's amazing to think that they would be locked away forevermore pretty much so, yeah.

MR BERRY: Then we have a community development fund which we can touch on in a moment, just to look at getting some more material benefit into the community. This is just an overview to give, I guess, a context of the size of the impacts relative to the conservation network within the area. So as you can see, the conservation proposed stewardship site occupies a fairly significant portion of the bush in the area and really adds to these where you've got Karuah National Park and the Karuah Nature Reserve up here. That is fairly - fairly significant improvement to it.

20 Section 7-11, this is obviously road levy for Mid-Coast and Port Stephens. In terms of when we were going through the process of what blasting community benefits we could come up, because the project doesn't have a - it's very hard to tie the project impacts to any one measure, I guess, we looked at the option of coming up with a community development fund as a - as a levy on production so there's some nexus between the number of vehicles on the road and contribution into community and then looking at that CDF being actually managed through the community consultative committee we'd have members of the public putting up ideas or options for support projects that would then - could then be voted on by the community to be put back into
30 community. So really looking to build the community and provide a - I guess a legacy for the next 30 years that the project will contribute to and provide a wide range of things.

PROF. BARLOW: What's the sort of magnitude of that community development fund, Jonathan?

MR BERRY: So it will be - sorry, \$50,000, up to, so at maximum production rate. So we've tied it to production rate.

40 PROF. BARLOW: Yes.

MR BERRY: So at 500,000 tonnes we'd have \$50,000 a year going into that - into that fund.

MR MULLANEY: We also said there'd be a minimum of 10,000 available in the first year.

MR BERRY: Just to ensure we kick it off and start with 10,000 so there's - you know, and this would be an opportunity for - I guess, it's - we haven't really tried to limit -

limit what it would be used for and we sort of expect that the community consultative committee would come together and look to build the picture of what that would aim to support but I sort of think it could be, you know, sporting teams, it could be community members looking for support for education. There could be a broad range of opportunities where that money could go into support - support the community and ideally focused on the - the people impacted the most closest to the community and then, I guess, going out from there.

10 MR MULLANEY: Footpaths or anything they wanted to put it against.

MR BERRY: And Council would be involved in that too so, I guess, they're part of that CCC and could have some opinion on that matter as well so - - -

PROF. BARLOW: Yes.

20 MR BERRY: Heritage. We've got no particular heritage constraints that were identified during our studies so that will be all fairly managed with some standard controls, management plans in consultation with the Aboriginal community to ensure that's all management appropriately and, I guess, we touched on rehab. So this is, I guess, a bit of a picture of what that - we intend it to look like at the end of the day. We've got some woodland, creek line but, I guess, draining - drainage draining through to the dam here and then overflowing into the creek. Structures were obtained for that future land use consistent with the - with the zone.

30 MS MILLIGAN: I had a question about that, Chair. The suggested recommended conditions include one that there be growth in rehabilitation so you're minimising the exposed area. Have you done modelling, do you know what the maximum exposed area would be at any one time or what are your thoughts on that progressive rehabilitation and what's - what's possible or what are you planning?

MR BERRY: Yeah. Look, it is - I will say it is a little bit limited to do in a quarry such as this. We do have - like we've obviously got the batters and this - this road here comes through early, we're able to rehabilitate those aspects. Once the benches are completed we can start working on the benches but it is - because it is going from quite a deep - this area here is in the order of 70 metres deep so it does take quite a time to actually complete an area sufficient to actually rehab after it. So we - we have got - there is some sequencing within our EIS that does, I guess, touch on that.

40 MR MULLANEY: If an area's finished we can definitely rehabilitate it. So if the - the progressive rehabilitation, so if you have - the top bench is finalised you can spread top soil on that and spread the seed, plant trees, whatever needed to be done as you go. So definitely - definitely just not going to leave it bare, if there's an area that's had the material extracted from and it's in its finished state then it will be rehabilitated but it's going to take quite a long time to get there.

PROF. BARLOW: You know, you're going to rip out a lot of rock and you'll have a rock substratum then. So how are you going to rehabilitate it? Is that with top soil or what

MR MULLANEY: Yeah. It - we've got an area there that's going to be kept for the top soil storage. So the top soil would be stored there and maintained - be vegetated to maintain it in a good condition and kept like to minimise erosion and everything and also not - not a big mountain of it so you've got to keep it at a certain - like minimum - I think it's two or three metres - two metres is ideal thickness.

MR BERRY: So within the lower portion of the pit this area here - is this window sharing, can you see those - see those plans?

10

PROF. BARLOW: Yes. Yes.

MR BERRY: So with this - within this lower area there is quite a bit of friable material. So we've got the top soil that we pull off from the - from the quarry itself which is limited, I will say, in - in amount. We do have some other friable material here that would be quite useful and then we've also talked about having some, I guess, we say popping the floor to ensure that we end up with some fracturing and ability for roots to get some hold within the floor. So you might end up with a process of whether you over-blast a certain patch through to there so you do get some more penetration and you don't end up with this hard pan rock floor with limited else that can go on.

20

MR MULLANEY: As well as - because you definitely can't rip it and the other thing that we will have will be some overburden material which we could keep aside to put a layer down across the floor and then put the top soil on top of that so - - -

MR BERRY: So when we talk about the progressive rehab, I guess, you can see the green - you might see the green areas on here, what we're trying - so you can see early on in this area we're sort of quite constrained in what we can rehabilitate at that time. We've got this small area here and then as you go - so this is say from stage 2 - this is stage 7 so we've advanced a few years here but we're now able to rehabilitate these benches. You'll note that they've gone from a wide trafficable bench to a narrower bench and that's really - the width of those benches is about trying to get vehicles from the low point down here to the high point at the top of the hill.

30

MS MILLIGAN: I suppose the progressive nature of it sort of speaks significantly to the dust issue so I was just interested to know sort of how that will happen because I know there are bigger issues about rehabilitation in its final form but as you go along it will have a big impact on dust presumably.

40

MR BERRY: Yeah. There's - and a lot of that has been modelled within the - you know, these - these plans were put forward to the - would've been included within the air quality model so some of that would've been taken into account for sure but, I guess, the nature of the material probably helps with the dust too as opposed to being a more friable say - - -

MR MULLANEY: Yeah, it does.

MR BERRY: Yeah.

MR MULLANEY: With the rain - so as the rain washes the fines off those benches you'd end up with more rocking material left even until you actually top-soiled it. So there shouldn't be much dust coming off those benches, it would be more of a concern on the - on the quarry floor and any vehicles that are travelling generating dust.

PROF. BARLOW: O.K.

10 MR BERRY: I think that's about it so, yeah, no, we've worked through those conditions and - - -

PROF. BARLOW: Very good. Thank you. Now, Ken and Janett, do you have any questions for Tim and Jonathan?

MS MILLIGAN: No, I think we've covered them all as we've gone along.

PROF. BARLOW: Yes, that's the process. Ken?

20 MR KANOFSKI: Yes, similarly, I think I'm O.K.

PROF. BARLOW: Yes. O.K. That's been, I think, very useful particularly as we've been through this before. We're going to visit the site so we have a much better feel for it and it will be much better again when we stand on the site.

MR BERRY: Certainly. And, I guess, in terms of that site visit if there's any aspects that, you know, between now and then you think you'd really like to take a look at please - - -

30 PROF. BARLOW: Just one parting question and this may come back is Tim mentioned some of the - no, the offset areas biodiversity, what are your plans as far as access to that area because I know it's not easy because you don't want all sorts of people wandering through those but at the end of the day do you have any long term plans about how the community could access those areas if they're good (not transcribable) (4.13.57).

MR MULLANEY: We have actually talked about but we haven't actually got anything firmly put in place but we do realise that there's a potential that people would want to walk through there. Like that cascading waterfall and some of the bush
40 around the back there is - is - yeah, it's really lovely.

MR BERRY: Yeah. And one of the things, I guess, touching on that perception side of things we have sort of looked at is whether some of these stewardship sites as opposed to just Deep Creek Quarry popping up on Google Earth is someone zooms in there that we'd actually look at is it possible to get these stewardship sites actually coming up to show that these are conservation areas and that - you know, in doing that we know we're opening up how, I guess, I don't know if we're inviting but it certainly becomes more enticing for people to investigate whether they can access it and I think

- I think we could certainly explore a process there, it's just ensuring people stay to the
- the nominated areas, I guess, that's - - -

MR MULLANEY: Yeah. And part of that rationale was - that Jonno had actually mentioned was if someone was Googling an Airbnb, for example, in the area he didn't just come up with Deep Creek Quarry, it would come up with this stewardship site or biodiversity area or something that would help to make the area - make people realise that there is a bit more going on environmentally, you know.

10 MR BERRY: And I suppose the only other thing I'd point out and it's probably worth pointing out, you'll notice the shape - somewhat unconventional shape of the stewardship area. What we've looked to do is have a look at the longer term potential in terms of what resource we know is in the area and look to say, O.K., well, look, it's not part of the application now, no plans for impact but it doesn't make sense to necessarily put this into conservation right now where there is potential down the track that that may be an option. Future generations, I guess, I don't think it's part of whether I'd ever be looking at that but it's certainly a space that we thought we don't want to lock that up if there is value still in that resource and that's why the shape of it is. That's why it is the shape it is.

20

PROF. BARLOW: Well, thank you, Jonathan, I'm conscious of the time.

MR BERRY: Yeah No, it's runaway, I'm sorry.

PROF. BARLOW: But it's been good. So Phoebe, is there anything that we haven't covered that we should've covered on the agenda?

MS JARVIS: No, I think we've covered it all well, thanks, Snow.

30 PROF. BARLOW: And I think Janett - Ken and Janett are fine. Well, can I thank you both very much for your open and forthcoming discussion that we've had and we look forward to seeing at least one of you next Tuesday. Thank you.

MR MULLANEY: We'd like to thank you all for your efforts and for your time today as well. We very much appreciate it and appreciate your interest in the aspects of the project and look forward to meeting you all next Tuesday as well, yep.

PROF. BARLOW: O.K. Thank you.

40 MEETING CONCLUDED